CLAIMS

1.　　A network analyzer comprising:

a measuring system error factor recording means that records a measuring system error factor generated independently of a frequency conversion by a device under test;

a correction coefficient output means that outputs measured first coefficients and second coefficients of a correction frequency converting element wherein a signal output from one terminal is represented as a sum of a product of a signal input to the terminal and the first coefficient and a product of a signal input to the other terminal and the second coefficient, and a ratio of the magnitudes of the second coefficients is constant; and

a transmission tracking error acquiring means that acquires a transmission tracking error generated by the frequency conversion based on the measuring system error factor recorded in said measuring system error factor recording means, and the first coefficients and the second coefficients output by said correction coefficient output means.

2.　　The network analyzer according to claim 1, wherein if the first coefficients are M11' and M22', the second coefficients are M12' and M21', a signal input to a first terminal is a1, a signal output from the first terminal is b1, a signal input to a second terminal is a2, and a signal output from the second terminal is b2 in said correction frequency converting element,

$b1 = M11' \times a1 + M12' \times a2$

$b2 = M21' \times a1 + M22' \times a2$, and

$|M12'| / |M21'|$ is constant.

3.   The network analyzer according to claim 1 or 2, wherein the magnitudes of the second coefficients are the same for either of the terminals.

4.   The network analyzer according to any one of claims 1 to 3 comprising:

an input signal measuring means that measures an input signal parameter relating to an input signal input to the device under test before the measuring system error factor is generated;

a plurality of ports that are connected to a terminal of the device under test, and output the input signal; and

a device-under-test signal measuring means that measures a device-under-test signal parameter relating to a device-under-test signal input from the terminal of the device under test to said port.

5.   The network analyzer according to claim 4, wherein said correction coefficient output means acquires the first coefficients and second coefficients of said correction frequency converting element according to a ratio of the input signal parameter measured by said input signal measuring means and the device-under-test signal parameter measured by said device-under-test signal measuring means.

6.   The network analyzer according to claim 4, wherein said transmission tracking error acquiring means acquires the transmission tracking error based on a ratio of error factors generated in a passage from the device-under-test signal being output from the terminal of the device under test without the frequency conversion to the device-under-test signal

being received by said device-under-test signal measuring means.

7. A network analyzing method comprising:

a measuring system error factor recording step of recording a measuring system error factor generated independently of a frequency conversion by a device under test;

a correction coefficient output step of outputting measured first coefficients and second coefficients of a correction frequency converting element wherein a signal output from one terminal is represented as a sum of a product of a signal input to the terminal and the first coefficient and a product of a signal input to the other terminal and the second coefficient, and a ratio of the magnitudes of the second coefficients is constant; and

a transmission tracking error acquiring step of acquiring a transmission tracking error generated by the frequency conversion based on the measuring system error factor recorded in said measuring system error factor recording step, and the first coefficients and the second coefficients output by said correction coefficient output step.

8. A program of instructions for execution by the computer to perform a processing for analyzing a network, said processing comprising:

a measuring system error factor recording step of recording a measuring system error factor generated independently of a frequency conversion by a device under test;

a correction coefficient output step of outputting measured first coefficients and second coefficients of a correction frequency converting element wherein a signal output from one terminal is represented as a sum of a product of a signal input to the terminal and the first coefficient and a

product of a signal input to the other terminal and the second coefficient, and a ratio of the magnitudes of the second coefficients is constant; and

a transmission tracking error acquiring step of acquiring a transmission tracking error generated by the frequency conversion based on the measuring system error factor recorded in said measuring system error factor recording step, and the first coefficients and the second coefficients output by said correction coefficient output step.

9. A computer-readable medium having a program of instructions for execution by the computer to perform a processing for analyzing a network, said processing comprising:

a measuring system error factor recording step of recording a measuring system error factor generated independently of a frequency conversion by a device under test;

a correction coefficient output step of outputting measured first coefficients and second coefficients of a correction frequency converting element wherein a signal output from one terminal is represented as a sum of a product of a signal input to the terminal and the first coefficient and a product of a signal input to the other terminal and the second coefficient, and a ratio of the magnitudes of the second coefficients is constant; and

a transmission tracking error acquiring step of acquiring a transmission tracking error generated by the frequency conversion based on the measuring system error factor recorded in said measuring system error factor recording step, and the first coefficients and the second coefficients output by said correction coefficient output step.